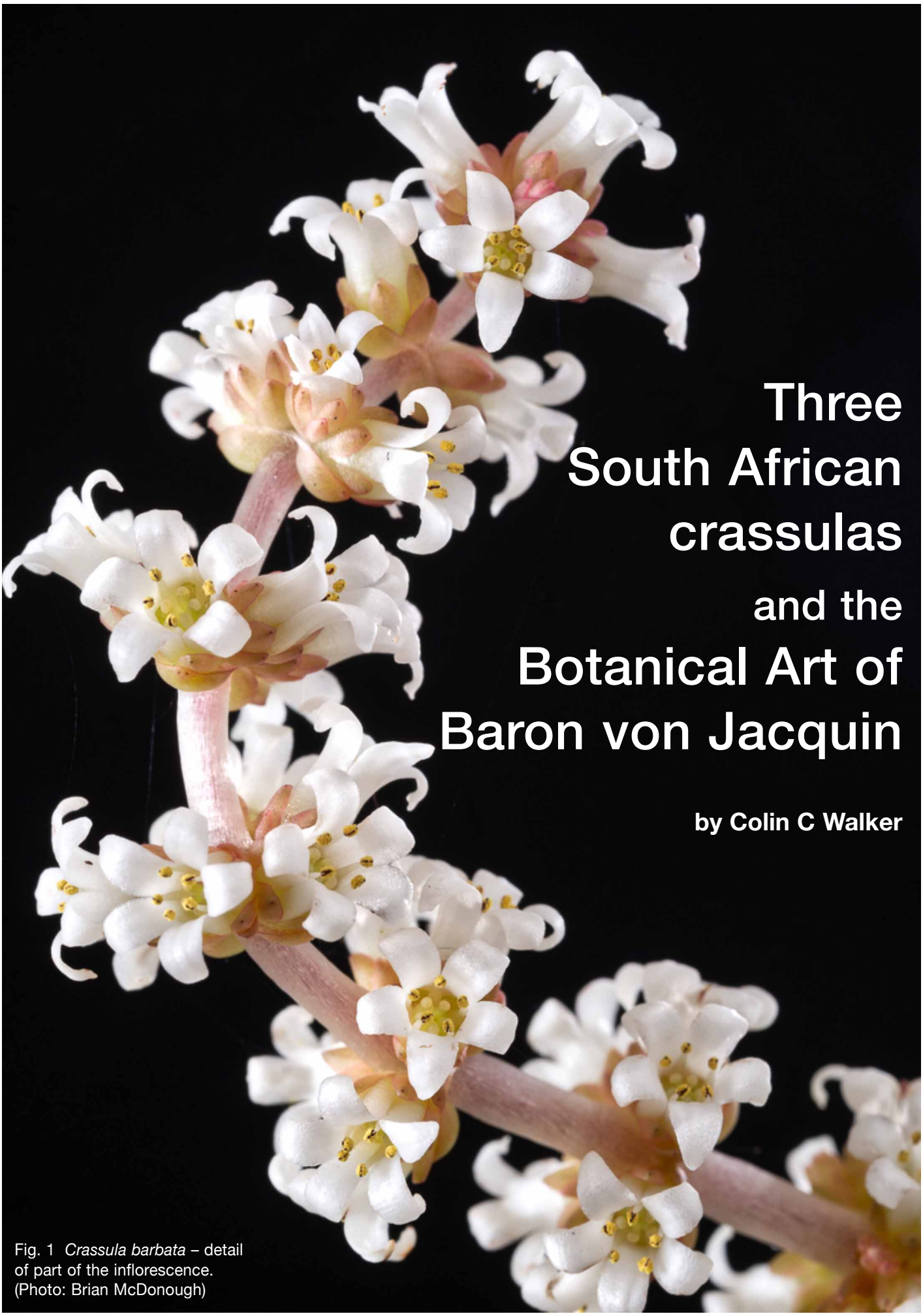
Three South African Crassulas and the botanical art of Baron von Jacquin



Three South African crassulas and the Botanical Art of Baron von Jacquin

by Colin C Walker

Fig. 1 *Crassula barbata* – detail of part of the inflorescence. (Photo: Brian McDonough)

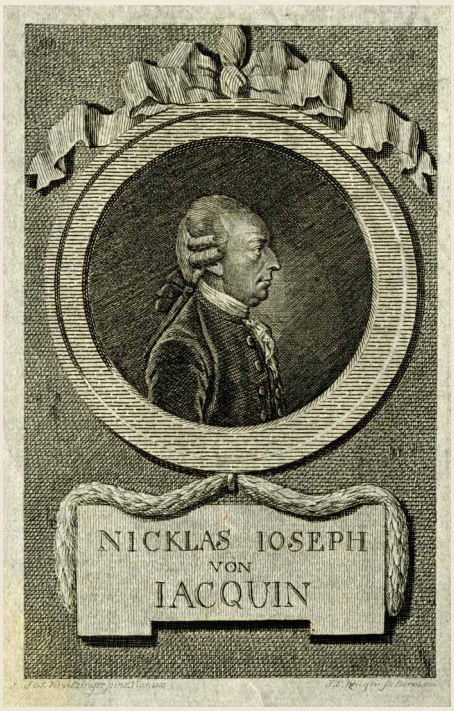
Introduction

Crassula is a relatively large and very diverse genus with perhaps around 200 species worldwide excluding Antarctica, (including one native British species), (Rowley, 2003).

For succulent growers, however, the greatest diversity of desirable species occurs in southern Africa where Tölken (1985) recorded 149 species with many subspecies and varieties.

Here just three South African species are showcased because they feature in the botanical art of Baron von Jacquin:

Crassula barbata,
C. perforata and
C. pellucida.



All three species have a long history in cultivation and are illustrated here with three plates from '*Plantarum rariorum horti caesarei Schoenbrunnensis descriptiones et icones*' known as one of Baron von Jacquin's finest books.

Fig. 2

Crassula barbata in cultivation with a developing inflorescence (Photo: Brian McDonough)

Nikolaus Joseph von Jacquin

Nikolaus Joseph von Jacquin (1727–1817) was the Director of the Imperial Palace gardens at Schönbrunn just outside Vienna, Austria and Professor of Chemistry and Botany and Director of the Botanic Gardens at the University of Vienna.

Schönbrunn, under Jacquin's leadership, became one of the most celebrated gardens of its time, where gigantic glasshouses were erected. In 1780 a severe frost accidentally brought about the loss of a significant number of plants. To replenish stocks the collectors Franz Boos and Georg Scholl were sent to South Africa from where frequent consignments of bulbs and seeds were dispatched to Vienna, mainly from what is now the Western Cape Province.

Schönbrunn is home to the oldest potted succulent in captivity: 'The Old Lady of Schönbrunn', a venerable specimen of *Fockea capensis* collected by Boos and Scholl, in cultivation there for over 200 years (Zecher, 1988).

The material collected was used as the basis for many of Jacquin's extravagantly produced books filled with hand-coloured plates, often published in very small print runs. Today Jacquin's books – in which many of the plants illustrated were newly described – are revered as wonderful works of botanical art (Blunt & Stearn, 1994).

Many of his books include succulents, but the only one to focus on our favourite plants is his '*Stapeliarum*' which includes 64 folio-sized coloured plates of stapeliads (Rowley, 1984), fortunately reprinted in facsimile in 1982 because this is one of the rarest of his rare books.

Blunt & Stearn (1994) describe Jacquin's '*Plantarum rariorum horti caesarei Schoenbrunnensis descriptiones et icones*' as his "greatest work on cultivated plants". This was issued in four volumes between 1797 and 1804 and includes 500 hand-coloured plates with accompanying text.

Of these only 36 illustrate succulents with a rough breakdown, using modern generic names, as follows:

Aeonium (1 sp.),
Aloe (1 sp.),
Crassula (7 spp.),
Epiphyllum (1 sp.),
Euphorbia (6 spp.),
Gasteria (2 spp.),
Haworthia (1 sp.),
Haworthiopsis (1 sp.),
Kalanchoe (1 sp.),
Kumara (1 sp.)
and 14 species of shrubby mesembs (published as *Mesembryanthemum* but now in several modern genera).
Thirty two of the 36 species are South African.

All seven crassulas were illustrated for the first time, hence the reason for this article to showcase the work of Jacquin. The plates themselves are magnificent hand-coloured works of art. Some are larger than A3 size (folio), for example the plate of *Kumara (Aloe) plicatilis,* whereas others, such as the *Haworthia* plate, are relatively small.

Eleven of Jacquin's new species are still recognised today including *Crassula dejecta* (not discussed further here).

Fig. 3

Crassula barbata (as *C. turrita*) from Jacquin (t.52, 1797)

Fig. 4

Crassula barbata – the rosette (Photo: Brian McDonough)

Crassula barbata

This species was first described in 1778 but Jacquin (1797) illustrated it as *C. turrita* (Fig. 3), now considered to be a synonym (Tölken, 1985).

This is deservedly a very popular species. It forms small single rosettes up to just 7cm in diameter (Fig. 4). The name '*barbata*' means 'bearded' and is highly appropriate and descriptive because the leaves are edged with silky hairs (trichomes) up to 5mm long.

The thin inflorescence is up to 30cm tall (Fig. 2) bearing numerous small, white tubular flowers (Fig. 1).

I have grown and flowered this species but unfortunately did not take any photos, so I am indebted to Brian McDonough for his excellent photography. As is usual, flowering terminates the growth of the plant (monocarpic) and mine promptly died! The plant could therefore be described as a biennial or even an annual if growth is fast. However, occasionally offsets are produced as in the case of one of Brian's plants (Fig. 5). These can be removed and rooted to propagate the plant.

Crassula barbata comes from the Western Cape Province of South Africa "in mountains bordering on the south-western parts of the Great Karoo from the eastern Cedarberg to near Prince Albert, growing on gravelly slopes" (Tölken, 1985).

Crassula barbata – newly developing offsets (Photo: Brian McDonough)

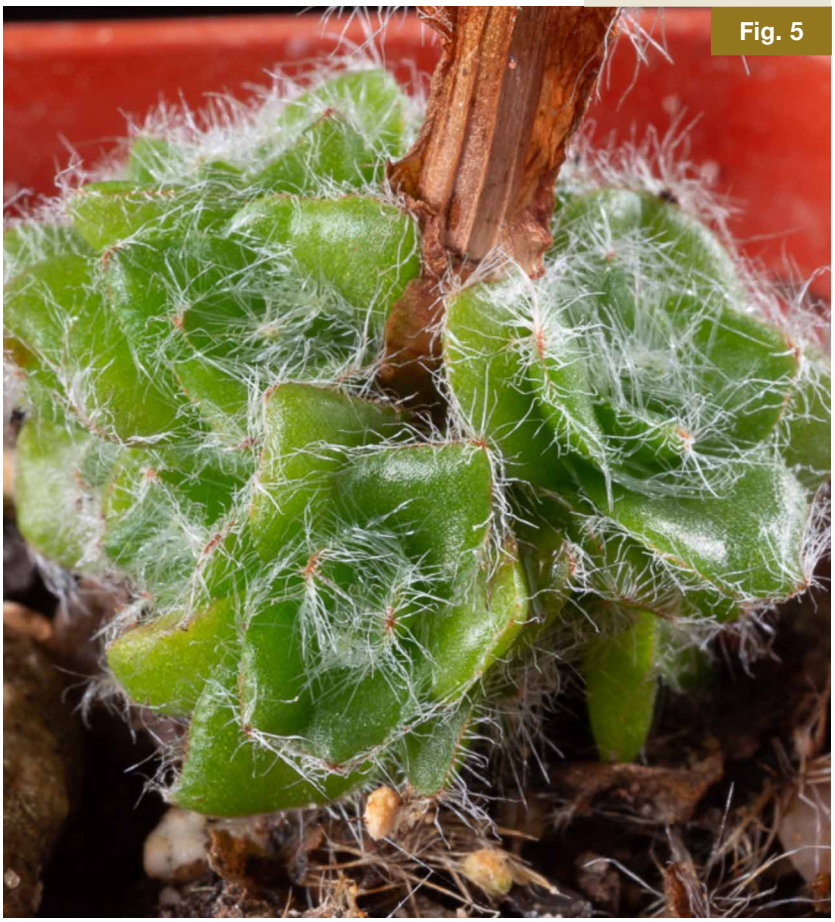


Fig. 5

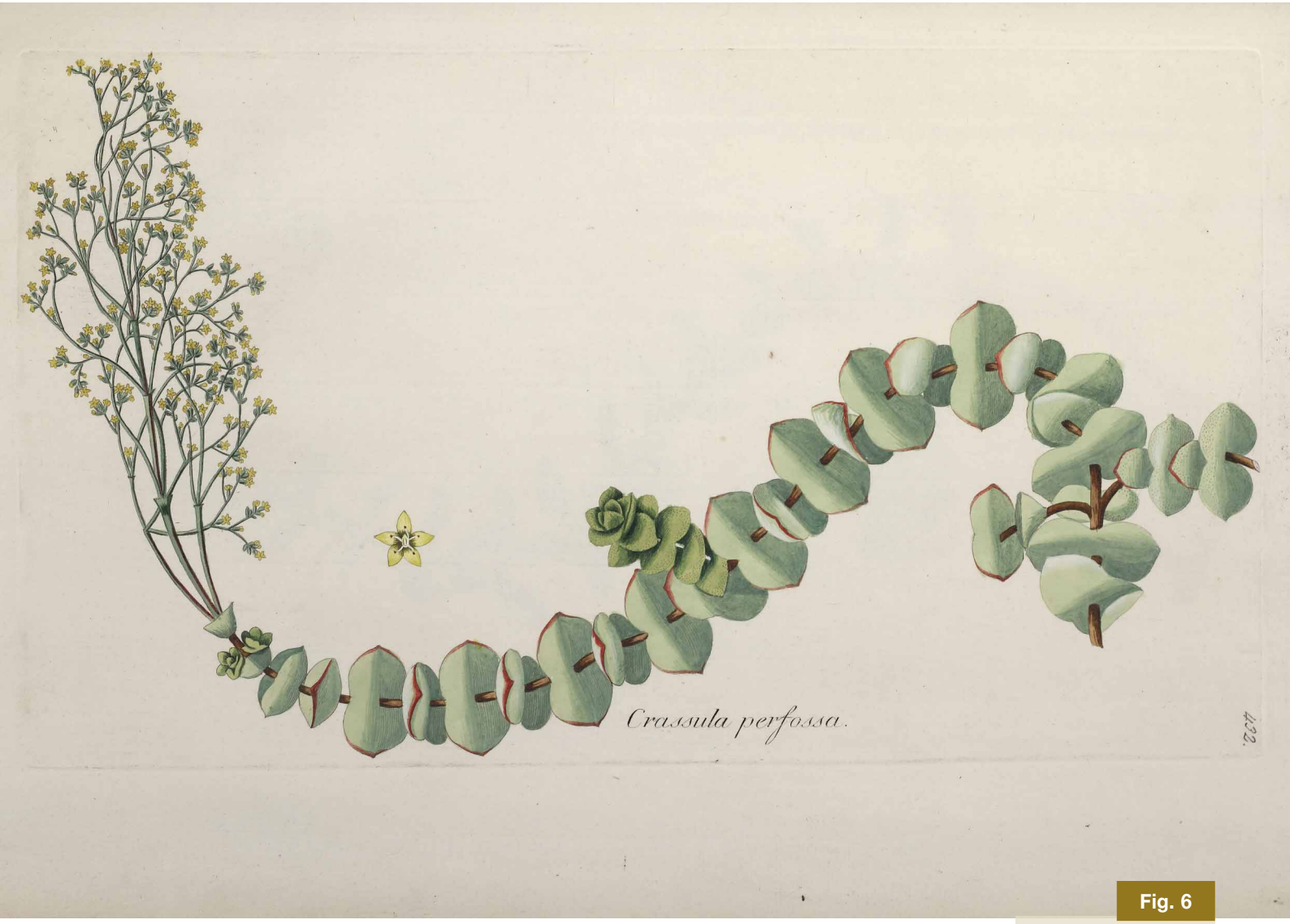


Fig. 6

Crassula perforata (as *C. perfossa*) from Jacquin (t.432, 1804)

Crassula perforata

This species was also first described in 1778 but Jacquin (1804) illustrated it as *C. perfossa* (Fig. 6), now considered to be a synonym (Tölken, 1985).

The plant is a perennial scrambler with woody branches up to 60cm long. The leaf pairs, which are fused at the base, look like they have been threaded as beads, to which the name '*perforata*' meaning 'pierced' refers. The leaves themselves are roughly ovate, greyish green with reddish or yellowish margins.

The species has a wide distribution throughout southern South Africa, from the Western Cape Province to north-eastern KwaZulu-Natal.

A distinctive and localised form is showcased here: subsp. '*kougaensis*'. This is an obligate cliff-dweller (cremnophyte) from the Eastern Cape Province, (re-discovered by Ernst van Jaarsveld on cliffs adjacent to the Kouga Dam, after which he named it (van Jaarsveld & van Wyk, 2009).

However, this plant has a longer history, regrettably not referred to by van Jaarsveld and van Wyk. It was first imported into the UK in 1930 by W.T. Neale and named as *C. nealeana* Higgins in 1955 (Higgins, 1964).

This new subspecies "grows on sheer cliffs at an altitude of 400–700m, mainly on exposed, north- and west-facing aspects of quartzitic cliffs" (van Jaarsveld & van Wyk, 2009) (Fig. 7). This plant is smaller growing than subsp. *perforata* with shorter stems up to about 30cm long and shorter internodes producing a denser arrangement of the paired leaves; it readily sprawls over the edge of a pot in cultivation (Fig. 8). The shortish inflorescences bear small tubular yellow flowers.

Fig. 7

Crassula perforata subsp. *kougaensis* growing at Whiskey Creek, The Crags, near Plettenberg Bay, Nov. 2011. (Photo: Derek Tribble)

Fig. 8

Crassula perforata subsp. *kougaensis* in an 18 cm diameter pot (Photo: Colin C Walker)

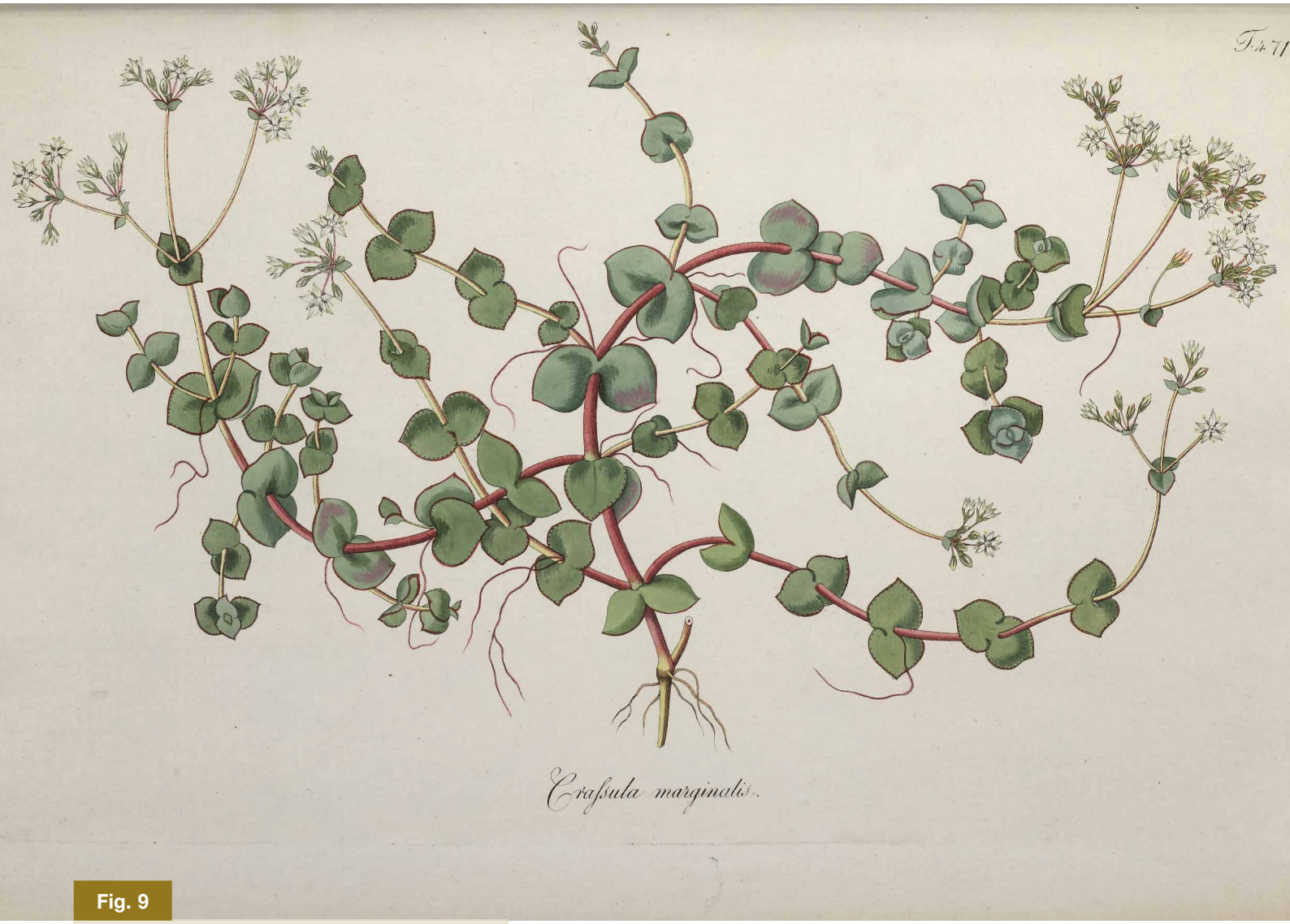


Fig. 9

Crassula pellucida var. *marginalis* (as *C. marginalis*) from Jacquin (t.471, 1804)

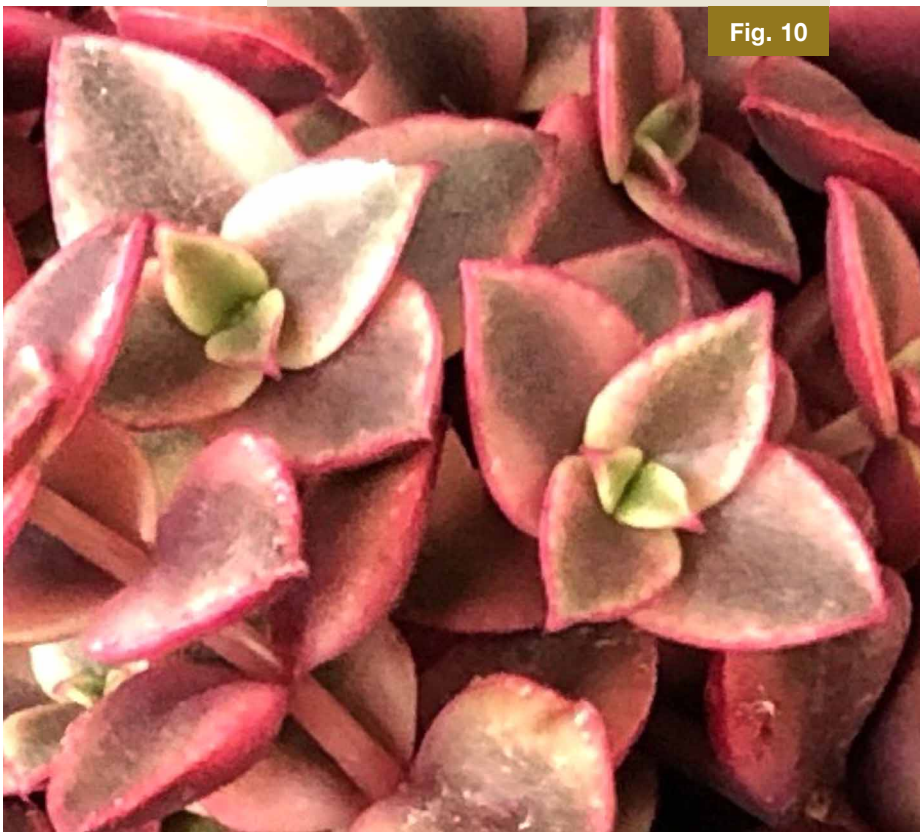
Crassula pellucida

This species was first described by Linnaeus in 1753. Of the three species considered here this has the widest distribution, ranging from South Africa northwards into tropical Africa (Kenya, Tanzania and Uganda). Consequently this species is extremely variable and has been split into five subspecies (Tölken, 1985) of which just subsp. *marginalis* is considered here. This was first named *C. marginalis* in 1789 and first illustrated by Jacquin (1804) (Fig. 9).

Crassula pellucida subsp. *marginalis* has sprawling or prostrate stems up to 60cm long with leaves in fused pairs. The leaf margins are red or colourless, hence the name '*pellucida*' for the 'colourless margins', whereas the name '*marginalis*' comes from the pronounced red edges (Fig. 10).

Crassula pellucida var. *marginalis* in cultivation (Photo: Colin C Walker)

Fig. 10



The short inflorescence bears many star-shaped white flowers tinged with pink.

Subsp. *marginalis* has a broad distribution in the Western and Eastern Cape Provinces of South Africa where it grows "from near George to East London, usually associated with rock outcrops where it grows in shaded moist places under rocks or in forest" (Tölken, 1985). ■

Acknowledgements

Andrea Deneau and the Linnean Society of London are thanked for providing the three images from Jacquin's book and for permission to reproduce these here.

I thank Brian McDonough and Derek Tribble for use of their excellent photos.

My wife Marjorie read and commented on an earlier draft of this article.

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